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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/758,176

01/15/2004

Richard Reynolds

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BURR & BROWN
PO BOX 7068
SYRACUSE, NY 13261-7068

EXAMINER

WEST, JEFFREY R

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	<p>Application No. 10/758,176</p>	<p>Applicant(s) REYNOLDS ET AL.</p>	
	<p>Examiner JEFFREY R. WEST</p>	<p>Art Unit 2857</p>	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 08 February 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☒ The Notice of Appeal was filed on 08 February 2008. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: _____.
- Claim(s) objected to: _____.
- Claim(s) rejected: _____.
- Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Jeffrey R. West/
Primary Examiner, Art Unit 2857

Applicant argues:

...Because Cisco teaches that the measurements are to be taken based on a simulated VoIP call (Cisco, Page 70), Cisco teaches that the system is to be solely a synthetic sampling method, which uses "network traffic generated strictly for the purpose of measuring a network performance characteristic" (Cisco, Page 19).. Cisco does not suggest that the system and method can or should be used to produce something other than a single final report on the specific network performance characteristic (i.e., jitter), the report including all of the data generated by the synthetic VoIP call.

Scott discloses a system and method for managing jitter buffering (Scott, Abstract). Scott teaches that the system and method includes a traffic analyzer that calculates an average jitter using a sliding window array (Scott, Column 5, lines 22- 25). Scott teaches that the sliding window is to include a number of preceding jitter values where the last of the previously stored jitter values (i.e. J[Ns]) is removed when a new jitter value is saved, (Scott, Column 5, lines 33-36). Accordingly, Scott teaches that an output (i.e. a new average jitter) is to be generated with each new jitter value. Therefore, the system and method of Scott do not generate a final report based on all of the data generated by a synthetic VoIP call. Instead, the continually updated average jitter derived from an actual call is used to make adjustments to a jitter buffer.

It should be noted that Scott specifically teaches the continually updating process is required for the proper functioning of a traffic analyzer, which is an essential component in managing a jitter buffer (Scott, Column 5, line 57 - Column 6, line 21). It is this continuing update, output and elimination of jitter data from the average jitter value, as taught by Scott, that would necessarily change the principle of operation of Cisco, and would be provide irrelevant data if it were to be somehow added as part of Cisco's final report.

Schulzrinne is used by the Examiner only for its alleged disclose of an alternate equation that allegedly could be used in place of the average jitter equation used in Scott. Schulzrinne would not have provided any reason why one skilled on the art would modify the principle of operation of Scott to provide a final report.

With respect to the teachings of Cisco, while Applicant argues that "Cisco does not suggest that the system and method can or should be used to produce something other than a single final report on the specific network performance characteristic (i.e., jitter), the report including all of the data generated by the synthetic VoIP call", the Examiner asserts that Cisco also does not indicate that the system and method couldn't or shouldn't be used to provide a mean opinion score. As such, given the teaching and motivation of Bearden, the Examiner maintains the combination.

With respect to the teachings of Scott, the Examiner asserts that Scott is only relied upon for determining a long term average and differential jitter parameter of the extracted parameters and is not relied upon for report generation.

The Examiner also notes that Applicant does not discuss the teachings of Bearden while it is Bearden that is relied upon by the Examiner for teaching the generation of an estimated mean opinion score in dependence upon the set of jitter parameters.

Applicant argues:

Referring now to the Examiners stated motivation to combine, the Examiner alleges, in lines 4-7 on page 6 of the Office Action, that "it would have been obvious to one having ordinary skill in the art to modify the invention of Cisco to explicitly include means for determining a long term average and differential jitter parameter of the extracted parameters, as taught by Scott and Schulzrinne, because, as suggested by Scott, the combination would have improved the speech quality analysis of Cisco by determining a more complete group of jitter parameters." In light of the above descriptions of Cisco and Scott, it should be apparent that to add the continually updated average jitter parameter of Scott and Schulzrinne would necessarily change the principle of operation of Cisco to perform individual updates to values (including a average.jitter value and a differential .jitter value) for each additional jitter value added rather than providing a detailed final report resulting from a synthetic VoIP call. Therefore, Applicants respectfully submit that the Examiner's combination of Cisco, Scott, Schulzrinne and Bearden is technically without merit, because to combine Scott and Schulzrinne with the method and system of Cisco would have necessarily changed the principle of operation of Cisco.

The Examiner asserts that the proposed modification of Cisco by Scott and Schulzrinne will inherently modify the operation of Cisco as the proposed modification is to explicitly include means for determining a long term average and differential jitter parameter of the extracted parameters, however, the Examiner asserts that such a modification does not make the invention of Cisco inoperable for its intended purpose. This is because the invention of Cisco already teaches determining a plurality of different jitter parameters including MinOfPositivesSD, MaxOfPositivesSD, NumOfPositivesSD, SumOfPositivesSD, MinOfNegativesSD, MaxOfNegativesSD, NumOfNegativesSD, SumOfNegativesSD, Sum2PostiviesSD, Sum2NegativesSD, etc. As such, a modification to determine additional jitter parameters would not make Cisco inoperative in any way.

Additionally, the Examiner maintains that the proposed motivation clearly provides advantages to the additional jitter parameters, specifically, the combination would have improved the speech quality analysis of Cisco by determining a more complete group of jitter parameters including a jitter variation which would provide an indication as to the changes in the size of a packet from the start to destination thereby allowing the user to monitor such a size change for determining a point of insufficient quality (column 3, line 66 to column 4, line 4) and, as suggested by Schulzrinne, the combination would have provided an equation for determining the average jitter of Scott in a simplified manner by providing a weighting similar to that of Scott but with increased accuracy and reduced burden with weighting to emphasize the long term jitter calculation and without requiring the individual weighting of each packet ("6.3.1 SR: Sender report RTCP packet")

Applicant argues:

The Examiner is respectfully requested to note that the inventor's have found that the recited long term average jitter parameter and the differential jitter parameter are particularly important factors in determining and generating a mean opinion score relating to the voice quality of a VoIP call. Cisco, Scott, Schulzrinne and Bearden each fail to disclose any direct relationship between these elements and a mean opinion score. Instead, Scott discloses that an average jitter value and a differential jitter value are to be used as part of a calculation to

adjust the size of a jitter buffer. Scott does not disclose or suggest that the average jitter value and the differential jitter value can or should be used a rating from which a mean opinion score can be determined. Therefore the combination of Cisco, Scott, Schulzrinne, and Bearden would have failed to teach the method recited in claim 1 and the apparatus recited in claim 9, as a whole.

The Examiner asserts that the claimed invention does not provide any specifics as to the manner in which the average jitter value and the differential jitter are used to determine a mean opinion score. Rather, the claimed invention only generally requires the "generating an estimated mean opinion score in dependence upon said set of parameters". By providing such a limitation in general terms rather than providing specifics as to how the jitter parameters are used to determine a mean opinion score, the Examiner maintains that Bearden provides the necessary teaching of means for extracting a set of speech quality parameters, including jitter, and, generating an estimated mean opinion score in dependence upon the set of speech quality parameters (0085, lines 1-13) and storing the estimated mean opinion score on a computer-readable medium accessible by a user for visualization and analysis (0259, lines 1-19) as well as provides the necessary motivation that it would have been obvious to one having ordinary skill in the art to modify the invention of Cisco to explicitly include means for generating an estimated mean opinion score in dependence upon said set of parameters, as taught by Bearden, because, as suggested by Bearden, the combination would have improved the speech quality analysis of Cisco by employing a widely used, accepted, and understood scale of speech quality (0085, lines 1-13) and reducing the burden of a user to interpret the jitter results by instead providing the result in a clearly understandable numerical index of quality (0238, lines 24-38).